



W. Furkiss lith.

Hannhart imp.

AUSTRALIAN AND PACIFIC CICADIDÆ.

5. On some undescribed Cicadidæ from the Australian and Pacific Regions. By W. L. DISTANT.

[Received January 13, 1882.]

(Plate VII.)

The species here described are almost wholly from the Museum Godeffroy at Hamburg, the Rhynchotal collection of which I have been requested to determine by Mr. Schmeltz.

Australia is particularly rich in Cicadidæ; and from what little is known at present it probably possesses the greatest number of that family compared with any other region of the globe. *Cyclochila*, *Psaltoda*, *Henicopsaltria*, *Thopha*, *Cystosoma*, and *Chlorocysta* are genera remarkable in structure, some extremely limited and none numerous in species and, so far as our present knowledge extends, completely confined to Australia; whilst the genus *Melampsalta*, though not altogether confined to that continent, is yet even now known to comprise a greater number of Australian species than can be found belonging to a genus in any other fauna. Two genera, *Cicada* and *Tibicen*, have almost a world-wide range, or are at least found in all the zoological regions.

If we compare the distribution of the Australian Cicadidæ with the geographical features of the botany of the same region, coincidences at once appear. Many affinities, as has been so ably pointed out by Dr. Hooker, exist between the South-African and Australian floras; and genera are found common to these two regions which are found nowhere else. One very striking and parallel case may be mentioned in the Cicadidæ. The Australian genus *Cystosoma* is strikingly dissimilar to the usual generic type in having a wonderfully inflated and dilated abdomen: in South Africa we find in this respect an analogous genus in *Pydna*. The extraordinary multiplicity of Australian species in the genus *Melampsalta* reflects the abundance of species in the genus *Acacia* as found in the same region.

In the specific nomenclature I have largely used the names of Australian explorers, qualitative terms being an impossibility to provide for these insects, and more likely to obscure than to elucidate their differences.

COSMOPSALTRIA STUARTI, n. sp. (Plate VII. figs. 2, 2a, 2b.)

Body above pale greenish, sparingly pilose. Head with a spot on each lateral margin, and a smaller and rounded spot on each side of the ocelli, black; ocelli red margined with black; eyes dull ochraceous. Pronotum with two narrow, central, longitudinal fuscous fasciæ, somewhat faint and obliterated about centre, more widely divergent on anterior margin, and joined together on the posterior margin; oblique striæ behind eyes, and a spot on anterior inner border of lateral margin, also fuscous. Mesonotum with two central obconical spots mar-

gined with fuscous, a faint broken sublateral fascia on each side, an irregular spot on disk, and a small rounded spot in front of each anterior branch of basal cruciform elevation fuscous. Abdomen becoming faintly testaceous towards apex; body beneath and legs pale greenish; apices of the tibiæ, rostrum, tarsi, and apical segment of abdomen pale testaceous. Tegmina and wings pale hyaline; tegmina with the costal membrane pale greenish, the apical portion of the venation fuscous.

The abdomen is elongate, and much attenuated towards apex, the dorsal surface of the basal segment is somewhat rounded and produced anteriorly, and sinuated centrally on the posterior margin. The head, including outer margin of eyes (which are very large and prominent), is very little narrower than base of pronotum. The opercula reach the base of the third abdominal segment, and are broadly and deeply sinuate on their outer margin, with the apices rounded. Rostrum reaching posterior coxæ. Face with a central impression, and very strongly striated transversely.

Long. 21 millim.; exp. tegm. 51 millim.

Hab. Fiji Islands. (Mus. Godeffroy.)

This species is closely allied to *C. distans*, Walk., which is also found in the same locality. From this it differs in being only one half the size, and in having the dorsal surface of the basal segment of the abdomen sinuated behind, besides which the head is more produced in front and wider between the eyes relative to the width of the pronotum at the base. The opercula also are longer, as in Walker's species they do not reach the apex of the third abdominal segment.

TIBICEN BURKEI, n. sp. (Plate VII. figs. 3, 3a, 3b.)

♂. Head castaneous, area of the ocelli and two spots at base black, base ochraceous, more or less margined with black; pronotum ochraceous, with a central hourglass-shaped fuscous fascia, the centre of which is longitudinally ochraceous; on each side of disk is a small black curved fascia; oblique striæ, inner borders of lateral margins, lateral angles, and anterior border of posterior margin also blackish. Mesonotum black, with a small central angulated spot on disk, on each side of which is a waved and angulated fascia, narrowest and commencing on anterior margin and joined to anterior branches of basal cruciform elevation, followed by a straight sublateral fascia, ochraceous. Cruciform basal elevation dull ochraceous. Abdomen black, sparingly pilose; posterior margin of apical segment and anal appendage testaceous. Underside of head, sternum, and opercula ochraceous and pubescent, the last with the disk fuscous and posterior margin narrowly but clearly ochraceous. Face castaneous with the centre black. Anterior legs ochraceous, femora streaked with fuscous, base of tibiæ and apex of tarsi fuscous, apical half of tibiæ somewhat castaneous. Intermediate and posterior legs with the coxæ luteous; femora pitchy, with the apices luteous; intermediate tibiæ castaneous, with the base ochraceous, posterior tibiæ ochraceous. Abdomen beneath black, with the apical segment and anal appendage testaceous. Tegmina and wings pale hyaline; tegmina with the costal membrane and basal

portion of venation ochraceous, costal area fuscous, anastomoses infuscated.

The rostrum just passes the apices of the posterior coxæ; face with the sides transversely striated, its width about equal to the distance from its lateral margin to inner margin of eyes; opercula not covering the apical margin of metasternum, with their posterior margins broadly rounded.

Long. 21 millim.; exp. tegm. 65 millim.

Hab. Australia, Peak Downs. (Mus. Godeffroy; coll. Dist.)

TIBICEN WILLSI, n. sp. (Plate VII. figs. 4, 4a, 4b.)

♀. Body above black. Head with the apex of face testaceous, the ocelli red. Pronotum with three large and confluent ochraceous spots on each side, somewhat narrowly separated at centre, and almost extending to lateral margins. Mesonotum black, with two very obscure obconical spots; basal cruciform elevation dull ochraceous. Abdomen black, with the apical segmental margins testaceous; anal appendage obscure pitchy-testaceous. Underside of body and legs pale testaceous; head between face and eyes black; lateral margins of sternum spotted with fuscous, and a lateral abdominal segmental row of transverse spots of the same colour. Tegmina and wings pale hyaline; tegmina with the venation fuscous, the costal membrane, basal and claval areas ochraceous, transverse veins at base of second and third apical areas, with connecting portion of longitudinal vein, infuscated; wings with the basal and claval areas ochraceous.

The face is very convex, narrowly and longitudinally sulcated, the sides transversely striated, rostrum reaching the posterior coxæ; posterior lateral angles of pronotum somewhat acutely amplified and produced.

Long. 20 millim.; exp. tegm. 53 millim.

Hab. Australia, Peak Downs, Sydney. (Mus. Godeffroy; coll. Dist.)

I have been enabled to examine nine specimens of this distinctly marked species, all of which, however, were females. In general appearance these have a superficial resemblance to the genus *Melampusalta*.

[Since writing the above I have discovered one male specimen of this species in the Godeffroy collection, which was received from Sydney. The opercula are pale ochraceous, with somewhat paler margin, and about reach the base of the first abdominal segment, they are slightly directed inwardly, the inner margins rounded and produced, but considerably apart, and the posterior margins wide and very slightly rounded.]

TIBICEN GILMOREI, n. sp. (Plate VII. figs. 8, 8a, 8b.)

♂. Body above dull testaceous. Head castaneous, the vertex somewhat darker than the front, area of the ocelli blackish. Pronotum with a central fuscous longitudinal fascia which has a very wide and triangular base, hind margin fuscous, with the posterior edge

pale ochraceous. Mesonotum with two central obconical spots bordered with ochraceous, a curved fascia on each side of disk connected with anterior branches of cruciform elevation ochraceous, and a lateral black fascia bordered outwardly (anteriorly) and inwardly (posteriorly) with ochraceous; basal elevation ochraceous with a black spot at centre and one on each branch near apex. Abdomen sparingly pilose, with the posterior segmental margins ochraceous. Body beneath and legs ochraceous; face castaneous; disk of abdomen more or less castaneous, posterior segmental margins pale, anal appendage with a central longitudinal fuscous streak. Tegmina and wings pale hyaline; tegmina with the veins fuscous, anastomoses and connecting longitudinal veins (excepting that before the last and lower anastomosis) infuscated, apices of longitudinal veins narrowly infuscated.

The body is short, the front of the head produced and prominent, the face long and convex, rostrum reaching posterior coxæ; opercula small, not covering metasternum.

Long. 18 millim.; exp. tegm. 60 millim.

Hab. Australia, Swan River. (Coll. Dist.)

This species is allied to *T. interrupta*, Walk., but larger, body shorter and more robust, and head with the front much more produced.

TIBICEN MUELLERI, n. sp. (Plate VII. figs. 6, 6a, 6b.)

♀. Body above ochraceous. Head with two small spots at base of front, a spot near anterior lateral angle of vertex, and area of the ocelli fuscous; eyes tinged with fuscous. Pronotum with two central longitudinal black fasciæ sinuated at centre and meeting on anterior and posterior margins; a small oblique fascia commencing from behind eyes and terminating on lateral margins also fuscous. Mesonotum with two small obconical spots, inwardly margined with fuscous, and an elongate fuscous spot on disk in front of basal elevation. Scutellum with a central fuscous spot, which is continued and narrowed on the first three segments of the abdomen; anal appendage with a large fuscous spot on each side. Body beneath and legs pale ochraceous, abdominal segments with a transverse series of broad fuscous fasciæ. Tegmina and wings pale hyaline; tegmina with the costal membrane and basal half of venation ochraceous, transverse veins at bases of first and second ulnar areas, anastomoses with some of the connecting venation, apical longitudinal veins, apical margins of apical areas, and claval margin fuscous; transverse veins at bases of second and third apical areas broadly infuscated.

The head has the front prominently produced; and its width, including outer margin of eyes, is less than that of the base of the pronotum; the face is large, elongate, and very convex, with a faint longitudinal impression, and somewhat obscure transverse striations. The rostrum reaches the posterior coxæ.

Long. 11 millim.; exp. tegm. 38 millim.

Hab. Australia, Peak Downs. (Mus. Godeffroy.)

TIBICEN GREGORYI, n. sp. (Plate VII. figs. 7, 7a, 7b.)

♂. Body above pale ochraceous. Head with the ocelli reddish, the eyes tinged with fuscous, mesonotum with two very obscure central obconical spots, a central discal longitudinal and two sub-lateral fasciæ. Abdomen somewhat thickly covered with greyish pilosity. Body beneath and legs pale ochraceous, excepting the abdomen, which is pale fuscous. Tegmina and wings pale hyaline; tegmina with the venation ochraceous, excepting apical longitudinal veins and apical margins of apical areas, which are pale fuscous; transverse veins at bases of second and third apical areas broadly infuscated.

The head is broad, and, including eyes, as wide as pronotum, of which the anterior and posterior width is subequal. The face is large, elongate, and very convex, with faint transverse striations. The rostrum reaches the posterior coxæ. The opercula are small, broad, and rounded posteriorly, and about reach the posterior edge of metasternum.

Long. 10 millim.; exp. tegm. 34 millim.

Hab. Australia, Peak Downs. (Mus. Godeffroy.)

This species is allied to the preceding (*T. muelleri*, Dist.), from which it differs in the broader and less anteriorly produced head, the shape of the pronotum, and in the different markings of the abdomen, tegmina, &c.

MELAMPSALTA WARBURTONI, n. sp. (Plate VII. figs. 9, 9a, 9b.)

Head with the vertex black, the front ochraceous with a black central longitudinal line. Pronotum ochraceous, with a central longitudinal fascia, lateral and posterior margins dark castaneous. Mesonotum dark castaneous, with two pale irregular fasciæ on disk, commencing on anterior margin and terminating at anterior angles of basal cruciform elevation; anterior lateral margins narrowly ochraceous. Abdomen ochraceous. Body beneath and legs ochraceous; head black, with the face ochraceous, of which the transverse striæ are castaneous. Tegmina and wings pale hyaline, with the venation ochraceous.

The body is sparingly pilose above; the anterior femora are armed with three strong spines; the rostrum just passes the intermediate coxæ; the face is narrowly but deeply sulcated longitudinally, and strongly transversely striate.

Long. 15 millim.; exp. tegm. 38 millim.

Hab. Australia, Peak Downs. (Mus. Godeffroy; coll. Dist.)

MELAMPSALTA FORRESTI. (Plate VII. figs. 10, 10a, 10b.)

♂. Body above ochraceous. Head with a transverse black fascia between the eyes, partly surrounding ocelli. Pronotum with the frontal portion of the interior edge of lateral margins narrowly black, and the anterior edge of posterior margin broadly of the same colour; two small obscure fuscous spots on anterior margin. Mesonotum with the following fuscous markings:—two central obconical spots, and two of somewhat like shape near lateral

margins, one commencing near outer edge of anterior margin; the other joins anterior angles of basal elevation; these angles are bordered outwardly by an angulated spot, and inwardly by a small rounded spot with a central longitudinal line. Abdomen with a series of pale fuscous transverse segmental fasciæ. Body beneath and legs pale ochraceous, inner margin of eyes black. Tegmina and wings pale hyaline, venation ochraceous, becoming darker towards apex.

The body above is sparingly pilose, the rostrum just passes the intermediate coxæ, with its apex black; the face is deeply longitudinally sulcated, and strongly transversely striate; anterior femora armed with three strong teeth.

Long. 15 millim.; exp. tegm. 41 millim.

Hab. Australia, Queensland, Gayndah. (Mus. Godeffroy; coll. Dist.)

The females of this species are somewhat larger than the males, but vary in size.

MELAMPSALTA EYREI, n. sp. (Plate VII. figs. 12, 12a, 12b.)

♂. Head black, with the anterior and lateral margins testaceous and with a small central basal ochraceous spot; ocelli reddish, eyes dull ochraceous. Pronotum ochraceous, with two very large rectangular black spots placed somewhat obliquely, commencing on inner edge of lateral margins, and divided on disk by a central longitudinal fascia which is widened anteriorly and posteriorly and is marked at base by a small black spot. Mesonotum with two central obconical spots placed close together, and two larger ones near lateral margins, black. Abdomen with the disk tinged with reddish, the posterior segmental margins bright ochraceous, the apical segment irregularly marked with black. Body beneath ochraceous; face black, with the anterior margin testaceous, the lateral margins ochraceous; inner margin of eyes to base of rostrum, a few scattered and irregular spots on sternum, apex of rostrum, and apical segments of abdomen black. Tegmina and wings pale hyaline; venation ochraceous, becoming darker towards apex.

The body is sparingly pilose, rostrum just passing the intermediate coxæ, anterior femora armed with three spines; face broad but compressed, broadly and longitudinally sulcated and distinctly transversely striate.

Long. 16 millim.; exp. tegm. 44 millim.

Hab. Australia, Peak Downs. (Mus. Godeffroy; coll. Dist.)

MELAMPSALTA MACKINLAYI, n. sp. (Plate VII. figs. 13, 13a, 13b.)

Closely allied to *M. varians*, Germ., but much smaller; head broader, including eyes equal in width to base of pronotum; rostrum just passing intermediate coxæ; opercula small and pale ochraceous; tegmina much shorter, with the costa more rounded.

Long. 13 millim.; exp. tegm. 38 millim.

Hab. Australia, Peak Downs.

This species has also considerable affinity to *M. themiscura*, Walk., in markings, but differs much in size.

MELAMPSALTA OXLEYI, n. sp.

♀. Body above ochraceous. Head with the frontal margin, lateral margins of vertex, inner margins of eyes, and area of the ocelli (the last extending to base of head, and connected with inner margins of eyes) very dark castaneous. Pronotum with a pale central longitudinal fascia, bordered with black on each side, widest anteriorly and narrowed posteriorly; lateral and posterior margins much paler, inner border of first, and outer third of inner border of the second, narrowly fuscous. Mesonotum with two short central obconical spots and two large sublateral and subtriangular spots dark fuscous, and a small rounded fuscous spot at each anterior angle of basal cruciform elevation. Abdomen with segmental bases very broadly fuscous, and with a large fuscous streak on each side of anal appendage. Body beneath pale ochraceous; face, rostrum, and two small spots at base of ovipositor more or less fuscous. Tegmina and wings pale hyaline; tegmina with the venation pale ochraceous, transverse veins at bases of second and third apical areas broadly and darkly infuscated; upper margin of first apical area, outer margin of first to seventh apical areas, gradually increasing in width, till the whole of the sixth and greater part of the fifth and seventh areas are occupied, and apical external margin dark fuscous.

The head is broad, and with outer margins of eyes about equals in width the base of pronotum; the face is moderately convex, with a deep longitudinal sulcation and strong transverse striations. Rostrum reaching the intermediate coxæ; and body sparingly pilose above and more densely so beneath.

Long. 18 millim.; exp. tegm. 48 millim.

Hab. Australia, Peak Downs. (Mus. Godeffroy.)

The tegminal markings render this species very distinct. I have seen but one specimen (here described), which is a female.

MELAMPSALTA LANDSBOROUGHII, n. sp. (Plate VII. figs. 14, 14a, 14b.)

♀. Head black, with a central longitudinal line to front and three basal spots ochraceous. Pronotum dull ochraceous, with a central pale fascia bordered with black, a short angulated fascia on disk and oblique striæ also black, lateral and posterior margins more or less shaded with black. Mesonotum black, very faintly and obscurely marked with ochraceous, the basal cruciform elevation pale ochraceous. Abdomen ochraceous with a broad central black fascia; the anal appendage with the lateral sides also broadly black. Body beneath, with the head, black, lateral margins of face ochraceous. Sternum much shaded with black. Legs ochraceous, coxæ and femora streaked with black and fuscous markings, anal appendage black, with a large spot on each lateral margin and extreme apex luteous. Tegmina and wings pale hyaline; tegmina with the costal membrane greenish-ochraceous, the veins fuscous.

The rostrum about reaches posterior coxæ; the face is broad, deeply and longitudinally sulcated, and transversely strongly striated;

the head, including eyes, is considerably narrower than base of pronotum; anterior femora armed with three strong spines.

Long. 16 millim.; exp. tegm. 45 millim.

Hab. Australia, Sydney. (Coll. Dist.)

This species was identified by Walker (List Hom. i. p. 172. 117, 1850) as the *Cicada melanopygia*, Germ., and thus stands in the collection of the British Museum. Germar's species, however, belongs to the genus *Tibicen*, and as such has been fully described by Stål (Ann. Soc. Ent. Fr. ser. 4, vol. 1, p. 618. 2, 1861.)

MELAMPSALTA LEICHARDTI, n. sp. (Plate VII. figs. 5, 5a, 5b.)

♀. Body above ochraceous. Head with the frontal anterior margin, a spot on anterior lateral angles of vertex, an oblique fascia behind eyes, two small linear spots between ocelli and eyes, a transverse spot on anterior margin of vertex, and antennæ black. Pronotum with two central linear black lines, not extending to posterior margin, and widened and angulated near anterior margin, oblique striæ, and inner border of posterior margin (on centre of which is a round spot) black. Mesonotum with two short contiguous central obconical spots, on each side of which is a more elongate and broken one, and two small rounded spots in front of basal cruciform elevation, black. Abdomen with a series of dorsal transverse black fasciæ, decreasing in width towards apex. Anal appendage with a black line on each side. Body beneath ochraceous; base and lateral margins of face, apex of rostrum, and ovipositor black. Legs ochraceous; femora streaked with fuscous; anterior tibiæ black, annulated with ochraceous near base. Tegmina and wings pale hyaline; tegmina with the costal membrane and area and veins enclosing basal ulnar area pale ochraceous, remaining venation fuscous.

Head, including eyes, equal in width to pronotum; rostrum reaching intermediate coxæ; face somewhat compressed, centrally and longitudinally broadly sulcated for half its length, and transversely striate.

Long. 10 millim.; exp. tegm. 25 millim.

Hab. Australia, Peak Downs.

This small but distinct species is allied to *M. sericevitta*, Walk.; and I am indebted to Mr. Pascoe for an opportunity of comparing the same. The figure here given is considerably enlarged.

CYSTOSOMA SCHMELTZI, n. sp. (Plate VII. figs. 11, 11a, 11b.)

Closely allied to the only other known species of the genus, *C. saundersii*, from which it differs in being only one third the size, and principally in the very different venation of the tegmina, the reticulations of which are faithfully portrayed in the figure, and cannot be adequately described, but are different in pattern and less extended in area than in the other species. The abdomen is much smaller and less inflated; the opercula are obscurely sinuated on their lateral and posterior margins.

Long. 25 millim.; exp. tegm. 62 millim.

Hab. Australia, Gayndah. (Mus. Godeffroy.)

The tegmina of this species are bright green: but this is probably a variable character, as *C. saundersii* was originally described by Westwood as "pallide lutea," which perfectly agrees with the specimens in my own collection. Mr. Scott, however (Proc. Zool. Soc. 1852, p. 16), states that this is not correct, but that the species is "læte viridis." The fact evidently is that these two colours are common to the species, as is so frequently the case with others, and especially with Australian members of the family.

ARCYSTASIA, n. gen.

Head, including eyes, slightly narrower than pronotum. Antennæ with the first joints short but stout and prominent. Pronotum with the lateral margins slightly dilated and strongly depressed, the posterior angles strongly produced and rounded. Rostrum reaching the intermediate coxæ. Tegmina hyaline, much longer than abdomen; ulnar veins somewhat widely separated and divergent at base; apical half of venation reticulated. Wings with the veins of the apical half numerous and slightly reticulated. Abdomen robust; tympana detached. Opercula of male well developed, not quite reaching basal segment of abdomen. Anterior femora strongly spined. Metasternum with a central raised furrow.

Allied to *Cystosoma* by the reticulated venation of the tegmina, but differing in the hyaline condition of the same and the non-dilated abdomen. I have placed it next the genus *Acrilla*, Stål, which has the tegmina shorter, rostrum longer, and the lateral thoracic margins not dilated.

ARCYSTASIA GODEFFROYI, n. sp. (Plate VII. figs. 1, 1a, 1b.)

♂. Body above dull testaceous and olivaceous. Head with the vertex dull testaceous, with a central fuscous longitudinal impression at base, the front dark obscure olivaceous, area of the ocelli with some slightly pithy markings. Pronotum dull testaceous with the lateral margins ochraceous, and a central fuscous longitudinal impression, of which the margins and raised base are pale testaceous. Mesonotum olivaceous, with two central obovate testaceous spots, on each side of which is a sublateral, slightly curved black fascia, the margins of which are testaceous; cruciform basal elevation pale testaceous, with a small rounded fuscous spot on inner side of apices of anterior branches. Scutellum pale olivaceous. Abdomen testaceous, the basal segment olivaceous. Body beneath pale testaceous; face, excluding margins, pale fuscous; sternum with olivaceous shadings. Legs olivaceous or testaceous; coxæ, trochanters, bases and apices of femora, and apices of tibiæ spotted with castaneous. Tegmina and wings pale hyaline; the tegmina tinted with pale ochraceous, with the venation darker ochraceous. Wings with the veins ochraceous.

The face is long and subdepressed, with a broad central sulcation and faint transverse impressions. The opercula are moderately large, but do not reach the base of the first abdominal segment, outer margins almost straight, posterior margins broad and slightly rounded.

inner margins not meeting. Anterior femora armed with three strong spines beneath.

Long. 22 millim.; exp. tegm. 63 millim.

Hab. Ponape (Caroline archipelago). (Mus. Godeffroy; coll. Dist.)

EXPLANATION OF PLATE VII.

- Fig. 1, 1a, 1b. *Arcystasia godeffroyi*, p. 133.
 2, 2a, 2b. *Cosmopsaltria stuarti*, p. 125.
 3, 3a, 3b. *Tibicen burkei*, p. 126.
 4, 4a, 4b. — *willsi*, p. 127.
 5, 5a, 5b. *Melampsalta leichardti*, p. 132.
 6, 6a, 6b. *Tibicen muelleri*, p. 128.
 7, 7a, 7b. — *gregoryi*, p. 129.
 8, 8a, 8b. — *gilmorei*, p. 127.
 9, 9a, 9b. *Melampsalta warburtoni*, p. 129.
 10, 10a, 10b. — *forresti*, p. 129.
 11, 11a, 11b. *Cystosoma schmeltzi*, p. 132.
 12, 12a, 12b. *Melampsalta eyrei*, p. 130.
 13, 13a, 13b. — *mackinlayi*, p. 130.
 14. 14a, 14b. — *landsboroughi*, p. 131.

February 7, 1882.

Prof. W. H. Flower, LL.D., F.R.S., President, in the Chair.

Mr. Henry Seebold exhibited a series of intermediate forms between *Carduelis caniceps* and *C. major* (the eastern form of our common Goldfinch, *C. elegans*), obtained at Krasnoyarsk in Central Siberia. The series showed every intermediate form between one species and the other, the white on the outer webs of the innermost secondaries increasing in exact proportion as the black on the crown and nape diminished. The supposition was that the two forms interbreed in this district and produce fertile offspring.

Mr. Sclater exhibited on behalf of Mr. Peter Inebald, F.Z.S., two curious Ducks which had been shot on some ornamental water near Darlington in the county of Durham. One of these appeared to be the result of a cross between the Pochard (*Fuligula ferina*) and one of the freshwater Ducks, possibly the Teal or Mallard; the other presented nearly the appearance of a female Scoter (*Ædemia nigra*), but was rather darker below.

The following papers were read:—